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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,909	02/20/2002	Christoph Schwemler	Mo6846/LcA 33,663	8764
157	7590	03/23/2006	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			PHASGE, ARUN S	
			ART UNIT	PAPER NUMBER
			1753	
DATE MAILED: 03/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/009,909	<b>Applicant(s)</b> SCHWEMLER ET AL.	
	<b>Examiner</b> Arun S. Phasge	<b>Art Unit</b> 1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10-12, 14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al. (Brown), U.S. Patent 3,952,088 in view of Japanese Patent 51-166987.

The Brown patent discloses the claimed process for decomposing organic compounds present in wastewater comprising the steps of obtaining a waste water having common salt and dissolved carbonate and treating the waste water with ozone with the claimed range of temperature, pressure, and time period (see col. 2, lines 3-61). The exact compositions of the water before and after treatment would have been within the purview of the ordinary artisan given the disclosure of the Brown patent, because such modification to concentration has been well settled to be within the skill of the ordinary artisan.

The Brown patent uses the ozone with an alkaline pH, preferably around 13 (see col. 2, line 20-23). The Japanese patent is cited to show that for wastewater containing organic material and carbonates, the pH should be in the acidic range to

prevent the disturbance by the carbonate radical (see Abstract, in particular the constitution).

Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the disclosure of the Brown patent with the teachings of the Japanese patent, because the Japanese patent teaches the use of a lower pH to remove organic material from wastewater and prevent the reaction with carbonate radical.

Claims 13, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of the Japanese patent applied as above and further in view of Silva, U.S. Patent 6,103,092.

The combination of Brown and Japanese patent fail to disclose the use of the purified water containing the sodium chloride used in an electrolytic cell to produce chlorine. The Silva patent is cited to show that a sodium chloride containing solution that has been purified by the removal of organic contaminants, such as the phenols can be used to form chlorine by electrolysis (see col. 4, line 45 to col. 5, line 23).

Therefore, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

disclosure of the Brown patent with the teachings of the Silva patent, because the Silva patent teaches that water that has been purified by the removal of organic contaminants can be used to produce chlorine by electrolysis.

*Response to Arguments*


Applicant's arguments with respect to claims 10-20 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun S. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Arun S. Phasge  
Primary Examiner  
Art Unit 1753

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